

ABSTRACT OF THE DISCLOSURE

In a device that interworks a VLAN network and an MPLS network, a VLAN ID is associated with an MPLS label. In a device that performs interworking from a VLAN network to an MPLS network, an output MPLS label is determined from a pair of a VLAN ID and the information in the layer 3 or layer 4 header of a packet. The output MPLS label is assigned an independent value for each VLAN. In a device that performs interworking from the MPLS network to another VLAN network, the input MPLS label is associated with a VLAN ID.